



The February 15 2011 CME-CME interaction and possibly associated radio emission

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On February 15, 2011 a particular, continuum-like radio emission was observed by STEREO WAVES and WIND WAVES spacecraft. The radio event appeared to be associated with the complex interaction of two coronal mass ejections (CMEs) successively launched (February 14 and February 15) from the same active region.

Although the CME-CME interaction was widely studied (e.g. Temmer et al., 2014, Maricic et al., 2014, Mishra & Srivastava, 2014) none of the analyses confirmed an association with the continuum-like radio emission.

The usual method of establishing temporal coincidence of radio continuum and a CME-CME interaction is not applicable in this event due to a complex and long-lasting interaction of the CMEs. Therefore, we performed radio triangulation studies (see also Magdalenic et al., 2014) which provided us with the 3D source positions of the radio emission.

Comparison of the positions of radio sources and the reconstructed positions of the interacting CMEs, shows that the source position of the continuum-like radio emission is about 0.5 AU away from the interacting CMEs. We can therefore conclude that, in this event, the continuum-like emission is not the radio signature of the CME-CME interaction.